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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,009	06/26/2001	Satchidanand Mishra	D/99021D	2624

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/892,009	<b>Applicant(s)</b> MISHRA ET AL.	
	<b>Examiner</b> Thu Khanh T. Nguyen	<b>Art Unit</b> 1722	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-13, 15-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-13, 15-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 13, 15-17, 22, 24, and 26-27 are again rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman (3,956,045).

Hoffman teaches an apparatus and method for bonding different film layers, comprising a support member (18) having a flat surface to receive and support a region of a flexible film (Fig. 2), a heatable member (19) having a smooth heatable flat surface for compressing and heating a portion of the seam region (col. 6, lines 10-21), wherein the heatable flat surface comprises a low surface energy or anti-adhesive material, such as a thin Teflon layer (col. 10, lines 55-53), a fluorocarbon layer or a polymer layer (col. 4, lines 13-14); wherein the heatable member could be a plastic strip (Fig. 22, 126, 127) aligned for centering over the seam, a compression heating bar (18, 19) or a rotatable compression rubber wheel (128, 129) which contacts the strip to compress the strip against the seam; wherein the heatable member could be a compression heating bar having a smooth heatable flat surface aligned to contact and uniformly compress the entire seam from one edge to the other (Figs. 19-22).

3. Claims 10, 12-13, 15, 17-19, 22-24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Off et al (4,214,933).

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Off et al teach an apparatus for depositing adhesive strips, a ribbon onto a length of metal, plastic or fabric material, comprising a support member (24, 82) having a flat surface to received and support a region of flexible length of material (54), a heatable member (44, 100, 152) having a smooth heatable flat surface for heating and compressing a portion of the flexible material (col. 2, lines 4-10), different outside heaters could also be used (col. 4, lines 34-37), wherein the surface of the heatable member is parallel to the flat surface of the support member (Figs. 1-2), wherein the heatable flat surface (44) comprises an abhesive material such as Teflon coating (col. 5, lines 5-9), wherein the heatable member is a heating bar having a smooth heatable flat surface (44, 100) or a rotatable wheel (136) made of steel, molded rubber or aluminum (col. 4, lines 28-30), wherein the heating strip (44) comprises an electrical resistance element (50) and imbedded resistance wire connected to an electricity source to raise the temperature of the heatable member (col. 4, lines 36-43) and insulation layer (52) to prevent heat transfer to areas other than the heatable member.

4. Claims 10-13, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunt et al (4,528,056).

Hunt et al teach an apparatus for reinforced the edge of sheet material, comprising a supporting member (62) having a support surface for supporting a seam region (58) of a flexible belt (48), and heatable members (54, 56, 60) for heating and compressing the seam region, wherein the heatable member has a width is about the same size of the adhesive tape (50-52) of about ½ inch or 17 mm and is a rotary wheel (60) movable for heating and compressing an indefinite length of the web material.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 16, 20, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Off et al ('933).

Off et al disclose an apparatus for depositing adhesive strips or ribbon on to a length of material as described above in which the heatable member having a Teflon coating layer, but fails to disclose that the heatable member is a strip has a width of between about 6mm to about 30mm and the heating wheel having a Teflon coating layer.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Off et al by varying the size of the heatable member in according to the size of the ribbon because if the heatable member is too big, it would waste energy to heat the unused portion, and if the heatable member is too small, it would not be enough to heat the entire cross-section of the ribbon. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Off et al by heating the material to a predetermined temperature in order to soften

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and to reshape the material. It is well settled that determination of optimum values of cause effective variables such as these process parameters is within the skill of one practicing in the art.

*In re Boesch*, 205 USPQ 215 (CCPA 1980).

It would also have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Off et al by providing a Teflon coating layer on the rotary wheel as provided in the heating bar (44), because the Teflon layer would prevent the shaping layer from sticking into the heatable member.

7. Claims 10, 13, 22-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onishi (4,461,662) in view of Schwarzkopf (3,551,259).

Onishi discloses an ultrasonic welding apparatus comprising a support member (1, 2, 12) with a flat surface for supporting the workpieces (P, Q), a heatable member (15) compressing the seam portion of the workpieces (Fig. 4), wherein the heatable member is a metal rotatable compression wheel (Fig. 2, 15) has a heatable flat smooth surface to heat a portion of the workpieces on the flat surface of the support means, and a heatable plastic strip (R, S); the heating surface of the wheel comprises adhesive material such as silicon (col. 4, lines 49-57); the compression wheel (15) is manually moved by a lift lever (23). However, Onishi fails to disclose that the support member comprises a non-adhesive material.

Schwarzkopf discloses an apparatus for heat-sealing two superimposed plied, comprising a heatable compress member (1), a support member (5) with a flat surface (10) made of Teflon and a silicon rubber pad (6) to provide a removable backing for the support member.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Onishi by providing a Teflon layer on the support member as

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taught by Schwarzkopf, because the Teflon layer would prevent the material from sticking to the support member during the heat welding process.

***Response to Arguments***

8. Applicant's arguments filed April 24, 2004 have been fully considered but they are not persuasive.

The Applicants argued that Hoffman ('045) disclose a different process than that claimed in the current invention, in which Hoffman disclose that films are compressed against one another and then heated, while in the current invention heat is first applied then compressing step is after. This is the intended use of the apparatus and does not have patentability weight in determine the patentability of the apparatus claims. It has been held that a functional limitation asserted to be critical for establishing novelty may, in fact, be an inherent characteristic of the prior art. The applicants is required to prove that the subject matter shown in the prior art does not necessarily possess the characteristics relied on. In re Schreiber, 128 F. 3d 1473, 1478, 44 USPQ 2d, 1432 (Fed. Cir. 1997); See also, In re Spada, 911 F 2d 705, 708, 15 USPQ 2d 1655, 1658 (Fed. Cir. 1977); In re Best, 562 F. 2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); and Ex Parte Gray, 10 USPQ 2d 1922, 1925 (Bd. Pat. App. & Int. 1989).

In regard to the rejection over the combination of Onishi and Schwarzkoff, the applicant alleged that even the combination was obvious, it would not result in the same apparatus as claimed because of the U-shape recess in the pressing contact surface and they are used for different process. Because the claims using the "comprising" language, they are opened for different limitations that taught by the prior art. The process limitation does not determined the patentability of apparatus claims, in which all the apparatus structures have been disclosed.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN

  
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PRIMARY EXAMINER  
GROUP 1300 1722  
6/22/04